PATENT
Attorney Docket No. 208753

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Hattori et al.

Application No. 09/765,865

Filed: January 18, 2001

Art Unit: 1636

Examiner: B. Loeb

For: NOVEL PLASMID, BEARING THE PLASMID, AND METHOD OF PRODUCING AN ENZYME USING THE TRANSFORMANT

PENDING CLAIMS AFTER AMENDMENTS MADE IN RESPONSE TO OFFICE ACTION DATED MARCH 26, 2002

1. A plasmid comprising a DNA fragment containing a gene coding for an enzyme taking pyrroloquinoline-quinone (PQQ) as the prosthetic group, wherein the plasmid is a broad-host-range vector defective for conjugative transfer function, and the plasmid is expressed in bacteria of the genus *Pseudomonas*.

2. The plasmid according to Claim 1 wherein the broad-host-range vector is a plasmid belonging to the incompatibility group P-4.

3. The plasmid according to Claim 1 wherein the enzyme taking PQQ as the prosthetic group is glucose dehydrogenase.

4. A transformant comprising the plasmid according to Claim 1 as introduced into a bacterial strain that produces an enzyme taking PQQ as the prosthetic group.

5. The transformant according the Claim 4 wherein the strain that produces an enzyme taking PQQ as the prosthetic group is a bacterial strain of the genus *Pseudomonas*.

6. A method of producing an enzyme taking PQQ as the prosthetic group, which method comprises growing the transformant according to Claim 4 in a nutrient medium to produce the enzyme taking PQQ as the prosthetic group in the culture broth and harvesting the enzyme taking PQQ as the prosthetic group from said culture broth.